...TENT COOPERATION TREA.Y

	From the INTERNATIONAL BUREAU
PCT	To:
NOTIFICATION OF ELECTION (PCT Rule 61.2)	Assistant Commissioner for Patents United States Patent and Trademark Office Box PCT Washington, D.C.20231 ÉTATS-UNIS D'AMÉRIQUE
Date of mailing (day/month/year) 18 February 2000 (18.02.00)	in its capacity as elected Office
International application No. PCT/US99/09935	Applicant's or agent's file reference PF-0509 PCT
International filing date (day/month/year) 04 May 1999 (04.05.99)	Priority date (day/month/year) 05 May 1998 (05.05.98)
Applicant	
HILLMAN, Jennifer, L. et al	***************************************
1. The designated Office is hereby notified of its election made X in the demand filed with the International Preliminary 03 December 1	Examining Authority on: 1999 (03.12.99) Pational Bureau on:

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer

Olivia RANAIVOJAONA

Telephone No.: (41-22) 338.83.38

Facsimile No.: (41-22) 740.14.35

02



INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER see Notification of	of Transmittal of International Search Report (20) as well as, where applicable, item 5 below.		
PF-0509 PCT	ACTION	20) as well as, where applicable, item 5 below.		
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)		
PCT/US 99/09935	04/05/1999	05/05/1998		
Applicant				
INCYTE PHARMACEUTICALS, II	NC. et al.			
according to Article 18. A copy is being tra		ority and is transmitted to the applicant		
This International Search Report consists It is also accompanied by	of a total of <u>5</u> sheets. a copy of each prior art document cited in this	report.		
Basis of the report				
 a. With regard to the language, the language in which it was filed, unl 	nternational search was carried out on the bas ess otherwise indicated under this item.	is of the international application in the		
Authority (Rule 23.1(b)).	as carried out on the basis of a translation of th			
b. With regard to any nucleotide an was carried out on the basis of the	d/or amino acid sequence disclosed in the in e sequence listing:	ternational application, the international search		
X contained in the internation	nal application in written form.			
	rnational application in computer readable form	1.		
furnished subsequently to this Authority in written form.				
furnished subsequently to this Authority in computer readble form.				
the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.				
the statement that the info furnished	rmation recorded in computer readable form is	identical to the written sequence listing has been		
2. X Certain claims were four	nd unsearchable (See Box I).			
3. X Unity of Invention is lack	-			
4. With regard to the title ,				
X the text is approved as su	omitted by the applicant			
	ned by this Authority to read as follows:			
5. With regard to the abstract,				
X the text is approved as sui				
the text has been establish within one month from the	ned, according to Rule 38.2(b), by this Authority date of mailing of this international search repo	y as it appears in Box III. The applicant may, ort, submit comments to this Authority.		
6. The figure of the drawings to be publi		-		
as suggested by the applic	ant.	None of the figures.		
because the applicant faile	ed to suggest a figure.	<u> </u>		
because this figure better	characterizes the invention.			

Box i	Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)
This Inte	ernational Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. X	Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely: Remark: Although claims 19 and 20 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. X	Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
	See FURTHER INFORMATION Sheet PCT/ISA/210
3.	Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box II	Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
This Inte	rnational Searching Authority found multiple inventions in this international application, as follows:
1.	As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2.	As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.	As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
	No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: See additional sheet, Invention 1.
Remark (The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.

Continuation of Box I.2

The subject-matter of claims 17 and 18 and of claim 20 in so far as it relates to antagonists is insufficiently characterized. A meaningful and complete search could therefore not be performed for said claims.

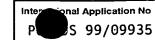
The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

1. Claims: 1-20 partially

A substantially purified polypeptide according to SEQ ID NO 1 or a polypeptide with at least 90% identity or a fragment thereof. Methods for producing said polypeptide. Antibodies, antagonists and agonists of the said polypeptide. Methods of treatment using said polypeptides or antagonists. An isolated polynucleotide encoding said polypeptide or an isolated polynucleotide with 70% identity to such a polynucleotide or a polynucleotide according to SEQ ID NO 66 and fragments of said polynucleotides. Methods for detecting said polynucleotides. Expression vectors comprising said polynucleotides and host cells comprising said expression vectors.

Inventions 2 to 65, claims: 1-20 partially

idem for SEQ ID NO 2-65 and the corresponding nucleotide sequences from SEQ ID NO 67-130.



A. CLASSII IPC 6	FICATION OF SUBJECT MATTER C12N15/12 C07K14/47 C07K16/1	18 C12Q1/68 /	A61K38/17				
According to	According to International Patent Classification (IPC) or to both national classification and IPC						
B. FIELDS							
IPC 6	cumentation searched (classification system followed by classification CO7 K	on symbols)					
Documentat	tion searched other than minimum documentation to the extent that s	uch documents are included in the fie	elds searched				
Electronic d	ata base consulted during the international search (name of data bas	se and, where practical, search terms	s used)				
C. DOCUME	ENTS CONSIDERED TO BE RELEVANT						
Category °	Citation of document, with indication, where appropriate, of the rele	evant passages	Relevant to claim No.				
X	HILLIER ET AL.: "WashU-NCI human Project" EMBL ACCESION NO AA190560, 21 January 1997 (1997-01-21), XPO the whole document		3-13				
Α	US 5 739 010 A (SHAH PURVI ET AL) 14 April 1998 (1998-04-14) column 30, line 24 -column 32, line 45 column 1, line 28 -column 2, line 23						
Α	FREIMAN ET AL: "Viral mimicry: mode of association with HCF by the cellular protein LZIP" GENES AND DEVELOPMENT, vol. 11, December 1997 (1997-12) 3122-3127, XP002114036 figures 1,4	VP16 and	1-20				
Furt	her documents are listed in the continuation of box C.	Patent family members are	listed in annex.				
"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but		"T" later document published after the or priority date and not in conflicited to understand the principle invention. "X" document of particular relevance cannot be considered novel or involve an inventive step when "Y" document of particular relevance cannot be considered to involve document is combined with one ments, such combination being in the art. "&" document member of the same particular relevance cannot be considered to involve document is combined with one ments, such combination being in the art.	ct with the application but e or theory underlying the e; the claimed invention cannot be considered to the document is taken alone e; the claimed invention e an inventive step when the e or more other such docupotosis to a person skilled				
	actual completion of the international search September 1999	Date of mailing of the internation	nal search report				
							
Name and n	nailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer van Klompenbui	rg, W				

2

Information on patent family members

US 99/09935

Patent document cited in search report		Publication date	Patent family member(s)	Publication date	
US 5739010	Α	14-04-1998	NONE		



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27	JUL	2000
		PCT
		27 JUL

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PF-0509 PCT	FOR FURTHER ACTION	See Notifie Preliminary	cation of Transmittal of International Examination Report (Form PCT/IPEA/416)	
International application No.	International filing date (day/m	onth/year)	Priority date (day/month/year)	
PCT/US99/09935	05 MAY 1999		05 MAY 1998	
International Patent Classification (IPC) of Please See Supplemental Sheet.	or national classification and IPC	•		
Applicant INCYTE PHARMACEUTICALS, INC				
Examining Authority and is	transmitted to the applicant a	been prepare	ed by this International Preliminary Article 36.	
2. This REPORT consists of a	total of <u>Sheets.</u>			
been amended and are th	panied by ANNEXES, i.e., shee e basis for this report and/or she tion 607 of the Administrative I	ets containing	ipuon, claims and/or drawings which have grectifications made before this Authority. Indee the PCT).	
These annexes consist of a to	tal of sheets.			
3. This report contains indication	s relating to the following ite	ems:		
I X Basis of the repor	nt			
II Priority				
III X Non-establishmen	III X Non-establishment of report with regard to novelty, inventive step or industrial applicability			
IV Lack of unity of	IV Lack of unity of invention			
V X Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
VI Certain documents	cited			
VII Certain defects in the	ne international application			
VIII X Certain observations	s on the international application	on .		
			ĺ	
Day Call 1 1 2 2 2				
Date of submission of the demand	Date	of completion	of this report	
03 DECEMBER 1999	06	JULY 2000		
Name and mailing address of the IPEA/U	•	rized officer		
Commissioner of Patents and Tradema Box PCT Washington, D.C. 20231		PERT A. ZE	MAN Juliere Lee Jac 03) 308-0196	
Facsimile No. (703) 305-3230	Teleph	one No. (70	03) 368-0196	

Form PCT/IPEA/409 (cover sheet) (July 1998)*

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

national	application	No.

PCT/US99/09935

L.	Bar	is of t	he report		
1.	With 1	regard t	o the elements of the international applicat	ion:•	
	X t	the inte	ernational application as originally f	īled	
	$\overline{\mathbf{x}}$	the des	eription:		
	ر ک	pages .	1-86		, as originally filed
	1	pages .	NONE		, filed with the demand
	1	pages .	NONE	, filed with the letter of	
i	<u> </u>		•		
	تنا	the cla pages _	97 ANTO 00		an animinally 61. d
	-	pages _		, as amended (together with any si	, as originally filed
	_	pages .			, filed with the demand
	-	_		with the letter of	
		_			
l			wings:		
	•	pages			
		pages _			, filed with the demand
	I	pages _	NONE	, filed with the letter of	
1	X t	he sea	uence listing part of the description:		
ı	י ניי. ז	oages	1 102		as originally filed
	F	ages _	NONE	, filed with the letter of	
]	u	he lang	ruage of publication of the internation uage of the translation furnished for the	the purposes of international search (unonal application (under Rule 48.3(b)). purposes of international preliminary exam	
_	With	regard		sequence disclosed in the international basis of the sequence listing:	application, the international
L	XI c	ontaine	ed in the international application in	printed form.	
Γ	– ը	led to	gether with the international applica	tion in computer readable form.	
Ī	fı	urnishe	d subsequently to this Authority in	written form.	
Ī	fı	urnishe	d subsequently to this Authority in	computer readable form.	
Ī	I I	he stat itemati	ement that the subsequently furnished onal application as filed has been furn	written sequence listing does not go be nished.	yond the disclosure in the
	ן ב	he state een fun	ement that the information recorded in chished.	computer readable form is identical to the	writen sequence listing has
4.[X	he am	endments have resulted in the cance	ellation of:	
		× th	e description, pages NONE		
		∑ th	e claims, Nos. NONE		
		X th	e drawings, sheets/fig NONE		
5.	X T	his rep	ort has been drawn as if (some of) the a	mendments had not been made, since they	have been considered to go
i	Replac	ement s report	the disclosure as filed, as indicated in the heets which have been furnished to the re- as "originally filed" and are not annex	ne Supplemental Box (Rule 70.2(c)).** ceiving Office in response to an invitation un xed to this report since they do not contai	der Article 14 are referred to in amendments (Rules 70.16
**	Any re	eplacen	nent sheet containing such amendments	must be referred to under item I and an	nexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT



IIL N	on-establishment of opinion with regard to novelty, inventive step and industrial applicability
	questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be strially applicable have not been and will not be examined in respect of:
	the entire international application.
X	claims Nos. <u>17, 18 AND 20</u>
	because:
	the said international application, or the said claim Nos. relate to the following subject matter which does not require international preliminary examination (specify).
	the description, claims or drawings (indicate particular elements below) or said claims Nos. are so unclear that no meaningful opinion could be formed (specify).
	the claims, or said claims Nos are so inadequately supported by the description that no meaningful opinion could be formed.
X	no international search report has been established for said claims Nos. 17, 18 AND 20.
	aningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid nee listing to comply with the standard provided for in Annex C of the Administrative Instructions: the written form has not been furnished or does not comply with the standard. the computer readable form has not been furnished or does not comply with the standard.



PCT/US99/09935

Inventive Step (IS) Industrial Applicability (IA) Citations and explanations (Rule 70) Claims 3-14 and 16 novelty under PCT Article January 1997). The claimed polynuclotide is aforementioned claims. Additionally, the methot to said translation products are deemed obvious	Claims Claims Claims Claims Claims Claims 30.7) Claims	1, 2, 15 AND 19 3-14 and 16 1, 2, 15 AND 19 3-14 and 16 1-16 AND 19 NONE anticipated by Hillier et al (EMBL Accession No lier et al. within the scope of the limitations:	YES NO YES NO NO
Inventive Step (IS) Industrial Applicability (IA) citations and explanations (Rule 70) Claims 3-14 and 16 novelty under PCT Article January 1997). The claimed polynuclotide is aforementioned claims. Additionally, the metho	Claims Claims Claims Claims Claims Claims 30.7) Claims	3-14 and 16 1, 2, 15 AND 19 3-14 and 16 1-16 AND 19 NONE anticipated by Hillier et al (EMBL Accession No lier et al. within the scope of the limitations:	NO YES NO YES NO NO
Inventive Step (IS) Industrial Applicability (IA) citations and explanations (Rule 70) Claims 3-14 and 16 novelty under PCT Article January 1997). The claimed polynuclotide is aforementioned claims. Additionally, the metho	Claims Claims Claims Claims Claims Claims 30.7) Claims	3-14 and 16 1, 2, 15 AND 19 3-14 and 16 1-16 AND 19 NONE anticipated by Hillier et al (EMBL Accession No lier et al. within the scope of the limitations:	NO YES NO YES NO NO
Industrial Applicability (IA) citations and explanations (Rule 70 Claims 3-14 and 16 novelty under PCT Article January 1997). The claimed polynuclotide is aforementioned claims. Additionally, the metho	Claims Claims Claims 0.7) 33(2) as beings disclosed Hil	3-14 and 16 1-16 AND 19 NONE anticipated by Hillier et al (EMBL Accession No lier et al. within the scope of the limitations:	NO YES NO
Industrial Applicability (IA) citations and explanations (Rule 70 Claims 3-14 and 16 novelty under PCT Article January 1997). The claimed polynuclotide is aforementioned claims. Additionally, the metho	Claims Claims Claims 0.7) 33(2) as beings disclosed Hil	3-14 and 16 1-16 AND 19 NONE anticipated by Hillier et al (EMBL Accession No lier et al. within the scope of the limitations:	NO YES
citations and explanations (Rule 70 Claims 3-14 and 16 novelty under PCT Article January 1997). The claimed polynuclotide is aforementioned claims. Additionally, the metho	Claims 0.7) 33(2) as being	NONE anticipated by Hillier et al (EMBL Accession No lier et al. within the scope of the limitations	NO
citations and explanations (Rule 70 Claims 3-14 and 16 novelty under PCT Article January 1997). The claimed polynuclotide is aforementioned claims. Additionally, the metho	Claims 0.7) 33(2) as being	NONE anticipated by Hillier et al (EMBL Accession No lier et al. within the scope of the limitations	NO
citations and explanations (Rule 70 Claims 3-14 and 16 novelty under PCT Article January 1997). The claimed polynuclotide is aforementioned claims. Additionally, the metho	0.7) 33(2) as being disclosed Hil	anticipated by Hillier et al (EMBL Accession No lier et al. within the scope of the limitations	
Claims 3-14 and 16 novelty under PCT Article January 1997). The claimed polynuclotide is aforementioned claims. Additionally, the metho	33(2) as being disclosed Hil	lier et al. within the scope of the limitations	
Claims 1, 2, 15 and 19 the criteria set out in P claimed polypeptide or the use of HTRM as a	treatment com	2)-(4), because the prior art does not teach or fai	iny suggest the



VIII. Certain observations on the international application				
The following observations on the clarity of the claims, description, and drawings or on the question whether the supported by the description, are made:	claims are fully			
Claim 19 did not teach what, if any beneficial effects would be realized by the administrating the claimed pharmaceutical composition. Moreover, one is unable to discern what constitutes a "subject in need". Claim 19 is objected to as lacking clarity under PCT Rule 66.2(a)(v) because practice of the claimed invention is not enabled as required under PCT Rule 5.1(a) for the reasons set forth in the immediately preceding paragraph.				
Applicant filed a response to Written Opinion (form PCT/IPEA/408) on 09 May 2000. Applicant respectfully traversed the Examiner's objections but did not list any possible errors.				
•				



Supi	olem	ental	Box
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(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 10

CLASSIFICATION:

The International Patent Classification (IPC) and/or the National classification are as listed below: IPC(7): C12N 15/12; C07K 14/47, 16/18; C12Q 1/68; A61K 38/17 and US Cl.: 530/388.1, 350; 435/69.3

I. BASIS OF REPORT:

5. (Some) amendments are considered to go beyond the disclosure as filed: NONE

From the INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To: LUCY J. BILLINGS INCYTE PHARMACEUTICALS, INC. 3174 PORTER DRIVE PALO ALTO, CA 94304

NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY **EXAMINATION REPORT**

(PCT Rule 71.1)

Date of Mailing (day/month/year) $oldsymbol{24}$ JUL 2000

IMPORTANT NOTIFICATION

Applicant's or agent's file reference

PF-0509 PCT

International filing date (day/month/year)

Priority Date (day/month/year)

PCT/US99/09935

International application No.

05 MAY 1999

05 MAY 1998

Applicant

INCYTE PHARMACEUTICALS, INC.

- 1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
- A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
- 3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/US

Commissioner of Patents and Trademarks

Box PCT Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

BERT A ZEMAN JULIERCE JOI RØBERT A

Telephone No. (703) 308-0196

119674743.011602

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EE	Estonia	LR	Liberia	SG	Singapore		

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶: C12N 15/12, C07K 14/47, 16/18, C12Q 1/68, A61K 38/17

A3

(11) International Publication Number:

WO 99/57144

(43) International Publication Date:

11 November 1999 (11.11.99)

(21) International Application Number:

PCT/US99/09935

(22) International Filing Date:

4 May 1999 (04.05.99)

(30) Priority Data:

60/084,254 5 May 1998 (05.05.98) US 60/095,827 7 August 1998 (07.08.98) US 60/102,745 2 October 1998 (02.10.98) US

(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Applications

US 60/084,254 (CIP)
Filed on 5 May 1998 (05.05.98)
US 60/095,827 (CIP)
Filed on 7 August 1998 (07.08.98)
US 60/102,745 (CIP)
Filed on 2 October 1998 (02.10.98)

(71) Applicant (for all designated States except US): INCYTE PHARMACEUTICALS, INC. [US/US]; 3174 Porter Drive, Palo Alto, CA 94304 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): HILLMAN, Jennifer, L. [US/US]; 230 Monroe Drive #12, Mountain View, CA 94040 (US). BANDMAN, Olga [US/US]; 366 Anna Avenue, Mountain View, CA 94043 (US). LAL, Preeti [IN/US]; 2382 Lass Drive, Santa Clara, CA 95054 (US). YUE, Henry [US/US]; 826 Lois Avenue, Sunnyvale, CA 94087 (US). REDDY, Roopa [IN/US]; 1233 W. McKinley Drive, Sunnyvale, CA 94086 (US). TANG, Y., Tom [CN/US]; 4230 Ranwick Court, San Jose, CA 95118 (US). GERSTIN, Edward, H. [US/US]; 1408 38th Avenue, San Francisco, CA 94122 (US). PATTERSON, Chandra [US/US]; 490 Sherwood Way #1, Menlo Park, CA 94025 (US). BAUGHN, Mariah, R. [US/US]; 14244 Santiago Road, San Leandro, CA 94577 (US). AZIMZAI, Yalda [US/US]; 2045 Rock Springs Drive, Hayward, CA 94547 (US). LU, Dyung, Aina, M. [US/US]; 55 Park Belmont Place, San Jose, CA 95136 (US).

- (74) Agents: BILLINGS, Lucy, J. et al.; Incyte Pharmaceuticals, Inc., 3174 Porter Drive, Palo Alto, CA 94304 (US).
- (81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published

With international search report.

(88) Date of publication of the international search report: 6 April 2000 (06.04.00)

(54) Title: HUMAN TRANSCRIPTIONAL REGULATOR MOLECULES

(57) Abstract

The invention provides human transcriptional regulator molecules (HTRM) and polynucleotides which identify and encode HTRM. The invention also provides expression vectors, host cells, antibodies, agonists and antagonists. The invention also provides methods for diagnosing, treating or preventing disorders associated with expression of HTRM.

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ation-' Application No./US 99/09935

CLASSIFICATION OF SUBJECT MATTER PC 6 C12N15/12 C07 C07K14/47 C07K16/18 C12Q1/68 A61K38/17 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 6 C07K Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Category 9 Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Х HILLIER ET AL.: "WashU-NCI human EST 3 - 13Project" EMBL ACCESION NO AA190560, 21 January 1997 (1997-01-21), XP002114035 the whole document Α US 5 739 010 A (SHAH PURVI ET AL) 1-20 14 April 1998 (1998-04-14) column 30, line 24 -column 32, line 45 column 1, line 28 -column 2, line 23 "Viral mimicry: common Α FREIMAN ET AL: 1-20 mode of association with HCF by VP16 and the cellular protein LZIP" GENES AND DEVELOPMENT. vol. 11, December 1997 (1997-12), pages 3122-3127, XP002114036 figures 1,4 Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents : T later document published after the international filing date "A" document defining the general state of the art which is not considered to be of particular relevance or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention filing date cannot be considered novel or cannot be considered to *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention citation or other special reason (as specified) cannot be considered to involve an inventive step when the "O" document referring to an oral disclosure, use, exhibition or document is combined with one or more other such docu ments, such combination being obvious to a person skilled document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 1 7. 12. **9**9 3 September 1999 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, van Klompenburg, W Fax: (+31-70) 340-3016

nt .tional application No.

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Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. X Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely: Remark: Although claims 19 and 20 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. X Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
See FURTHER INFORMATION Sheet PCT/ISA/210
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. X No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: See additional sheet, Invention 1.
Remark on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.

Continuation of Box I.2

The subject-matter of claims 17 and 18 and of claim 20 in so far as it relates to antagonists is insufficiently characterized. A meaningful and complete search could therefore not be performed for said claims.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

1. Claims: 1-20 partially

A substantially purified polypeptide according to SEQ ID NO 1 or a polypeptide with at least 90% identity or a fragment thereof. Methods for producing said polypeptide. Antibodies, antagonists and agonists of the said polypeptide. Methods of treatment using said polypeptides or antagonists. An isolated polynucleotide encoding said polypeptide or an isolated polynucleotide with 70% identity to such a polynucleotide or a polynucleotide according to SEQ ID NO 66 and fragments of said polynucleotides. Methods for detecting said polynucleotides. Expression vectors comprising said polynucleotides and host cells comprising said expression vectors.

Inventions 2 to 65, claims: 1-20 partially

idem for SEQ ID NO 2-65 and the corresponding nucleotide sequences from SEQ ID NO 67-130.

INTERNATIONAL SEARCH REPORT
International family members

Patent document cited in search report

US 5739010 A 14-04-1998 NONE

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Publication date

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